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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/510,107	05/23/2005	Charlotta Olsson	4055-1002	5068
<sup>465</sup> YOUNG & THOMPSON 209 Madison Street Suite 500 Alexandria, VA 22314			<div>EXAMINER</div> <div>CROW, ROBERT THOMAS</div>	
			<div>ART UNIT</div> <div>1634</div>	<div>PAPER NUMBER</div>
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Advisory Action**  
**Before the Filing of an Appeal Brief**

**Application No.**

10/510,107

**Applicant(s)**

OLSSON ET AL.

**Examiner**

ROBERT T. CROW

**Art Unit**

1634

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 30 September 2009 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  
Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because:  
(a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☒ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: None.  
Claim(s) objected to: 27-28 and 36-37.  
Claim(s) rejected: 19-25, 27-34 and 36-42.  
Claim(s) withdrawn from consideration: None.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.

/Robert T. Crow/  
Examiner, Art Unit 1634

Continuation of 3. NOTE: Applicant has amended the claims to include the limitation "to avoid quenching and intra-molecular thiol group formation." However, as discussed in detail below, page 15 of the specification states that the amount of label claimed, which is taught by Quake et al in view of Urdea et al, inherently results in the claimed property. Therefore, the combination of the prior art has the claimed characteristic; namely, the combination avoids quenching and intra-molecular thiol group formation. Thus, the amendments do not place the application in better form for appeal by materially reducing or simplifying the issues for appeal, and the amendments will not be entered.

In addition, the new limitations, which were not present at the time of the final rejection, would require further search and consideration to determine whether or not the claimed property of avoiding quenching and intra-molecular thiol group formation was well known in the art at the time the claimed invention was made. Therefore, because further search and consideration is required, the after final amendments will not be entered.

Continuation of 11. does NOT place the application in condition for allowance because: Applicant's after-final arguments filed 30 September 2009 (hereafter the "Remarks") are identical to the after final arguments filed 8 September 2009, which were fully considered and found unpersuasive for the reasons discussed in the Advisory Action mailed 18 September 2009. The response to the arguments presented in the Advisory Action of 18 September 2009 are reiterated below in response to the instant Remarks.

A. Applicant's arguments on pages 10 and 11 of the Remarks regarding the objection to claims 27 and 36 and the rejection under 35 USC 112, second paragraph of, claims 27-28, 33-34, and 36-41 refer to the amended claims and rely solely on the amendments. Because the after-final amendments were not entered, the objections and rejections are maintained.

B. Applicant argues on page 11 of the Remarks that the generic terminology for NP-40, Tween 20, and Triton X-100 are well known, and the evidence included with the Remarks clearly set forth the chemical constituents of the compositions.

However, as noted in the previous Office Action, a trademark or trade name is used to identify a source of goods, and not the goods themselves; thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. Applicant has provided no evidence that the chemical compositions listed in the amendment were the same chemical compositions known by and sold under the originally filed trade names at the time of filing.

It is also reiterated that if Applicant can provide evidence that the amendment is identical in scope to the trade names at the time of filing (e.g., by providing information from a catalog published at the time of filing or other evidence that the trade names and chemicals are in fact the same), the objection will be withdrawn. Applicant's submissions are unpersuasive because the evidence does not indicate that the amendment is identical in scope to the trade names at the time of filing. Specifically:

- i. the Wikipedia entry for NP-40 states that the entry was last modified 17 March 2009;
- ii. the catalog entry for NP40 has no publication date;
- iii. the Wikipedia entry for polysorbate 20 states that the entry was last modified 24 June 2009;
- iv. the catalog entry for Tween 20 has no publication date;
- v. the Wikipedia entry for Triton X-100 states that the entry was last modified 29 July 2009 and does not state n has an average of 9.5;
- iv. the Roche catalog entry for Triton X-100 was published September 2005;
- vi. the Sigma catalog entry for Triton X-100 has no publication date.

Therefore, the information does not necessarily concur with the filing date of the instant Application (i.e., 4 April 2002), and the objections and rejections are therefore maintained.

It is noted that the Response above should not be construed as an invitation to file an after final declaration. See MPEP 715.09 [R-3].

C. Applicant argues on page 13 of the Remarks that the claims range of labeled nucleotide avoids quenching and intra-molecular thiol group formation.

The arguments refer to the amended claims and rely solely on the amendments. Because the after-final amendments were not entered, the objections and rejections are maintained.

However, it is noted that In re Best (195 USPQ 430) and In re Fitzgerald (205 USPQ 594) discuss the support of rejections wherein the prior art discloses subject matter which there is reason to believe includes functions that are newly cited or is identical to a product instantly claimed. In such a situation the burden is shifted to the applicants to "prove that subject matter shown to be in the prior art does not possess characteristic relied on" (205 USPQ 594, second column, first full paragraph). Page 15 of the specification states that the amount claimed, which is taught by Quake et al in view of Urdea et al, results in the claimed property. Therefore, the combination of the prior art has the claimed characteristic; namely, the combination avoids quenching and intra-molecular thiol group formation.

D. Applicant argues on pages 14-15 that Quake et al is limited to the amount of labeled nucleotide as a result of the efficiency caused by

immobilization on the synthesis channel, which is not a restriction of the claimed invention.

However, as noted in the previous Office Action, any additional limitations are encompassed by the open claim language "comprising" in the instant claims.

In addition, as also noted in the previous Office Action, while claim 1 of Quake et al requires a synthesis channel, claim 1 of Quake is not a limiting embodiment Quake et al.

Further, as noted in the previous Office Action, the features upon which Applicant's argument relies (i.e., performance of the method without a synthesis channel) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

E. On pages 15-16 of the Remarks, Applicant reiterates the argument that neither Quake et al nor Urdea et al discuss avoiding quenching and intra-molecular thiol group formation.

However, as noted above, page 15 of the specification states that the amount claimed, which is taught by Quake et al in view of Urdea et al, results in the claimed property. Therefore, the combination of the prior art has the claimed characteristic; namely, the combination avoids quenching and intra-molecular thiol group formation.

In addition, in response to applicant's argument that neither Quake et al nor Urdea et al discuss avoiding quenching and intra-molecular thiol group formation, the fact that Applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

Thus, contrary to Applicant's assertions on page 16 of the Remarks, the combination of the prior art results in the claimed characteristic; namely, the combination avoids quenching and intra-molecular thiol group formation.

F. Applicant further argues on pages 16-19 of the Remarks that the claimed invention displays unexpected results, as presented in Figures 5-8.

However, as noted in the previous Office Action, the data presented in Figures 5-8 is based on the experimental procedure detailed in Example 4, and does not show any comparison to other methods (e.g., the method of Quake et al) so as to establish the alleged unexpected superior results. In fact, page 32 of the instant specification states that Figures 5-8 "show the selectivity of the polymerase for labeled against non-labeled nucleotides (emphasis added by the examiner)." Thus, the data does not show any advantage of using the claimed labeled nucleotides over any other labeled nucleotides (e.g., those of Quake et al). Thus, Applicant has resented no evidence that the claimed labeled nucleotides offer unexpected results over the labeled nucleotides of Quake et al.

It is noted that the Response above should not be construed as an invitation to file an after final declaration.

In addition, the data presented in Figures 5-8 (based on the experimental procedure detailed in Example 4 of the instant specification) is not commensurate in scope with the instant claims for the following reasons:

- i. The data is limited to specific biotinylated, fluorescein labeled oligonucleotides immobilized on streptavidinated beads; neither the specific oligonucleotides, biotin, fluorescein, nor streptavidinated beads are required by the instant claims.
- ii. The data is limited to specific buffers, temperatures, volumes and concentrations of reagents, as well as specific reaction steps (e.g., washing with TENT buffer); none of these limitations are required by the instant claims.
- iii. The data is limited to Cy5-SS-dNTPs, whereas the claim encompasses any labeled nucleotide having a fluorophore and a disulfide bond.
- iv. The data is limited to Klenow exo- polymerase, whereas the claim encompasses the use of any polymerase.
- v. The data is based on a pyrosequencing step not required by the instant claims.

Therefore, the method having the alleged unexpected results is not commensurate in scope with the instant claims, and the claims remain rejected as obvious over the prior art for the reasons cited above. See MPEP 716.02(d)[R-2].

/Robert T. Crow/  
Examiner, Art Unit 1634.